

WHAT IS CLAIMED IS:

1. A solid electrolytic capacitor comprising:
an anode composed of a metal;
5 a dielectric layer composed of an oxide of said metal
and formed on the surface of said anode;
an electrolytic layer; and
a cathode layer in this order,
said cathode layer having a laminated structure of a
10 carbon layer and a metal layer composed of metal particles
having an average particle diameter of not larger than 0.05
 μm and formed on said carbon layer.
2. The solid electrolytic capacitor according to Claim
15 1, wherein
said average particle diameter of said metal particles
is not smaller than 0.01 μm .
3. The solid electrolytic capacitor according to Claim
20 1, wherein
said metal particles include at least one kind of metal
selected from the group consisting of silver, gold, and
platinum.
- 25 4. The solid electrolytic capacitor according to Claim

1, wherein

said metal layer includes a protective colloid.

5. The solid electrolytic capacitor according to Claim

5 1, wherein

said electrolytic layer is composed of a conductive polymer.

6. The solid electrolytic capacitor according to Claim

10 1, wherein

said anode includes at least one kind of metal selected from the group consisting of tantalum, aluminum, niobium, and titanium.

15 7. A method of manufacturing a solid electrolytic capacitor including the steps of:

forming on the surface of an anode composed of a metal a dielectric layer composed of an oxide of said metal;

forming an electrolytic layer on said dielectric layer;

20 forming a carbon layer on said dielectric layer; and

forming on said carbon layer a metal layer composed of metal particles having an average particle diameter of not larger than 0.05 μm .

25 8. The method of manufacturing the solid electrolytic

capacitor according to Claim 7, wherein

said average particle diameter of said metal particles is not smaller than 0.01 μm .

5 9. The method of manufacturing the solid electrolytic capacitor according to Claim 7, wherein

said step of forming said metal layer includes the steps of:

applying on said carbon layer a metal paste including
10 said metal particles; and

drying said metal paste at a temperature of 150°C or higher after applying said metal paste.

10. The method of manufacturing the solid electrolytic
15 capacitor according to Claim 7, wherein

said step of forming said metal layer includes the steps of:

preparing a metal paste by mixing said metal particles and a protective colloid in an organic solvent; and
20 forming said metal paste on said carbon layer.

11. A method of manufacturing a solid electrolytic capacitor including the steps of:

forming on the surface of an anode composed of a metal
25 a dielectric layer composed of an oxide of said metal, an

electrolytic layer, and a carbon layer in this order;

preparing a metal paste by mixing metal particles and
a protective colloid in an organic solvent; and

forming a metal layer by applying said metal paste on
5 said carbon layer.